

RAILROAD ACCIDENT INVESTIGATION

Report No 3843

GREAT NORTHERN RAILWAY COMPANY

CUT BANK, MONT

APRIL 3, 1959

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	April 3, 1959	
RAILROAD	Great Northern	
LOCATION	Cut Bank, Mont	
KIND OF ACCIDENT	Rear-end collision	
TRAINS INVOLVED	Freight	Freight
TRAIN NUMBERS	Extra 278A West	Extra 432D West
LOCOMOTIVE NUMBERS	Diesel-electric units 278A, 269B, 276A, 205, 263A	Diesel-electric units 432D, 432C, 432B, 432A
CONSISTS	125 cars, caboose	80 cars, caboose
SPEED	Standing	Undetermined
OPERATION	Timetable, train orders, automatic block-signal system, yard limits	
TRACKS	Double, tangent, 0 80 percent descending grade westward	
WEATHER	Partly cloudy	
TIME	5 45 a m	
CASUALTIES	2 injured	
CAUSE	Failure properly to control the speed of the following train moving within yard limits and as required by signal indications	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3843

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER
THE ACCIDENT REPORTS ACT OF MAY 6, 1910

GREAT NORTHERN RAILWAY COMPANY

August 13, 1959

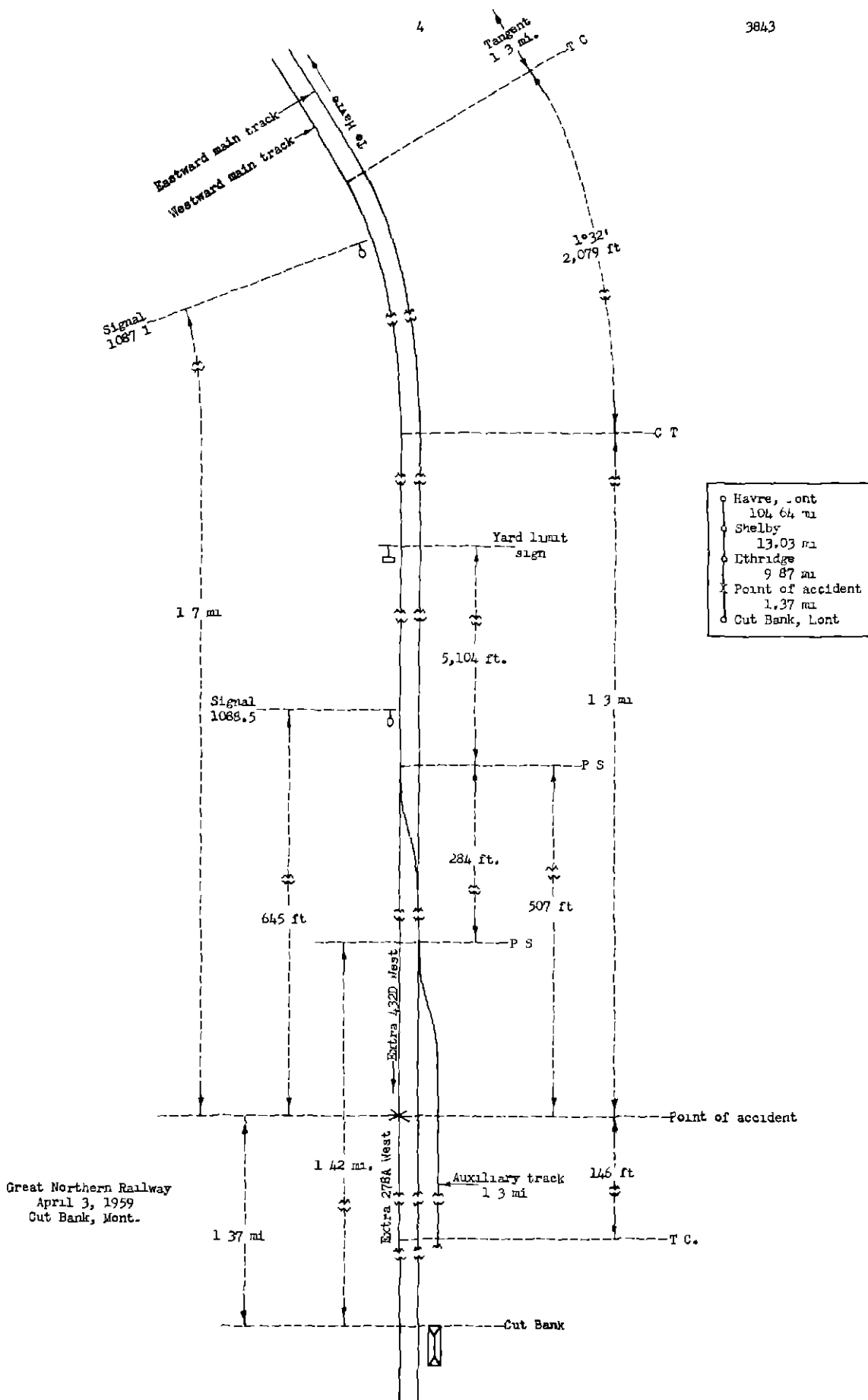
Accident at Cut Bank, Mont , on April 3, 1959, caused by failure properly to control the speed of the following train moving within yard limits and as required by signal indications

REPORT OF THE COMMISSION¹

FREAS, Commissioner

On April 3, 1959, at Cut Bank, Mont , there was a rear-end collision between two freight trains on the Great Northern Railway, which resulted in the injury of 2 train-service employees

¹Under authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Freas for consideration and disposition



Location of accident and Method of Operation

This accident occurred on that part of the Butte Division extending between Havre and Cut Bank, Mont , 128.9 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders, and an automatic block-signal system. Within yard limits at Cut Bank, an auxiliary track 1.3 miles in length parallels the eastward main track on south. The east switch of this track is trailing-point for eastbound movements on the eastward main track and is located 1.42 miles east of the station. A facing-point crossover connects the main tracks and its east switch is 284 feet east of the east switch of the auxiliary track. The east yard-limit sign at Cut Bank is located 5,104 feet east of the east switch of the crossover.

The accident occurred on the westward main track at a point 1.37 miles east of the station at Cut Bank and 507 feet west of the east switch of the crossover. From the east there are, in succession, a tangent 1.3 miles in length, a $1^{\circ}32'$ curve to the right 2,079 feet, a tangent 1.3 miles to the point of accident and 146 feet westward. In this vicinity the average grade is 0.80 percent descending westward.

Automatic signals 1087.1 and 1088.5, governing westbound movements on the westward main track, are located 1.7 miles and 645 feet, respectively, east of the point of accident. These signals are of the color-light type and are approach lighted. Aspects applicable to this investigation, and the corresponding indications and names are as follows:

Signal	Aspect	Indication	Name
1087.1	Yellow	Proceed on main route prepared to stop at next signal. Train exceeding medium speed must at once reduce to that speed.	Approach
1088.5	Red	Stop, then proceed at restricted speed.	Stop and proceed

The controlling circuits are so arranged that when the block of signal 1087.1 is unoccupied and the block of signal 1088.5 is occupied, signal 1087.1 displays an "Approach" aspect and signal 1088.5 displays a "Stop and proceed" aspect.

This carrier's operating rules read in part as follows:

Restricted Speed --Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

Medium Speed --A speed not exceeding thirty (30) miles per hour.

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Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines.

Within yard limits second and inferior class, extra trains and engines must move at restricted speed.

Note --Approach or proceed automatic block signal indications do not supersede the provisions of rule 93.

In the vicinity of the point of accident the maximum authorized speed for freight trains is 59 miles per hour, but, it is limited to "Restricted Speed" within yard limits

Description of Accident

Extra 278A West, a westbound freight train, consisting of diesel-electric units 278A, 269E, 276A, 205, and 263A, coupled in multiple-unit control, 109 cars and a caboose, departed from Shelby, 24.3 miles east of Cut Bank, at 4:10 a. m., and proceeded on the westward main track. At 5:05 a. m., this train stopped inside the yard limits at Cut Bank with the rear end 1.37 miles east of the station. About 40 minutes later, after 16 additional cars had been coupled to the front end of the train, the rear end was struck by Extra 432D West.

Extra 432D West, a westbound freight train, consisted of diesel-electric units 432D, 432C, 432B, and 432A, coupled in multiple-unit control, 80 cars and a caboose. This train departed from Shelby at 4:50 a. m., passed signal 1087.1 which displayed an "Approach" aspect, passed signal 1088.5 which displayed a "Stop and proceed" aspect, and while moving at an undetermined speed it struck the rear end of Extra 278A West.

The caboose and the 120th to 125th cars, inclusive, of Extra 278A West were derailed, and the derailed equipment stopped in various positions on or near the track structure. The caboose and the 121st to 125th cars, inclusive, were destroyed, and the 119th and 120th cars were somewhat damaged.

Extra 432D West stopped with the locomotive about 295 feet west of the point of accident. The four diesel-electric units and the first 23 cars were derailed. The diesel-electric units stopped in positions as shown in Plate 1, and the derailed cars stopped in various positions on or near the track structure. The four diesel-electric units were heavily damaged. Sixteen of the derailed cars were destroyed and six were heavily damaged.

The engineer and the fireman of Extra 432D West were injured.

The weather was partly cloudy at the time of the accident, which occurred about 5:45 a. m.

Discussion

After Extra 278A West stopped within yard limits at Cut Bank, the conductor and the flagman alighted from the caboose and proceeded to the front end of the train to assist the front brakeman in switching operations. Upon completion of the switching operations, the locomotive with 16 additional cars was coupled to the train. The accident occurred while all the members of the crew were at the front end of the standing train.

As Extra 432D West was approaching Cut Bank, the enginemen and the front brakeman were in the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. The brakes of the train had functioned properly when used en route. The headlight was lighted. As the train was passing Ethridge, 11.2 miles east of Cut Bank, the front brakeman went to the control compartment at the rear of the locomotive. When the train was about 1.2 miles east of signal 1087.1, the fireman left the control compartment to make a routine inspection in the engine compartments before arriving at Cut Bank. The engineer said that he had no recollection of having

observed the aspects displayed by signals 1087 1 and 1088 5 as the train approached and passed those signals, and that he was not aware of anything being wrong until the fireman re-entered the control compartment. He said that at this time he observed the caboose of Extra 278A West about 1/4 mile ahead on the westward main track, and immediately initiated an emergency application of the brakes. The engineer and the front brakeman said that the speed of the train was about 35 miles per hour when the brakes were applied in emergency shortly before the collision occurred. The conductor and the flagman said that they were unaware of anything being wrong until they heard the brakes of the train being applied in emergency. The engineer was off duty approximately 39 hours before going on duty for this trip. He said that he had obtained sufficient rest during his off-duty period, and that he was unable to remember anything that occurred during the absence of the fireman from the control compartment of the locomotive.

The 1st and 4th diesel-electric units of the locomotive of Extra 432D West were provided with speed-recording devices. The tapes of these devices were not recovered after the accident, except several small portions which were torn and illegible.

The signal system in the vicinity of the point of accident was tested after the accident occurred and was found to be functioning properly.

On the day after the accident, an examination of the brakes on the undamaged cars of Extra 432D West disclosed no defects which could have caused or contributed to the cause of the accident.

This accident occurred within yard limits. Under the rules governing the operation of trains within yard limits Extra 432D West was required to be operated in such manner that it could be stopped short of a preceding train. When a train passes a signal indicating "Approach" the speed must at once be reduced to medium speed and so controlled that the train can be stopped short of the next signal. The indication of the last signal which this train passed required that the train be stopped before passing the signal and also placed a restriction on its movement in the block in which the accident occurred similar to the requirement of the yard-limit rule.

Cause

This accident was caused by failure properly to control the speed of the following train moving within yard limits and as required by signal indications.

Dated at Washington, D C , this thirteenth
day of August, 1959

By the Commission, Commissioner Freas

(SEAL)

HAROLD D McCOY,
Secretary

Interstate Commerce Commission
Washington 25, D C
OFFICIAL BUSINESS
RETURN AFTER FIVE DAYS

POSTAGE AND FEES PAID
INTERSTATE COMMERCE COMMISSION